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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/820,790 | 04/09/2004 | Samir Gurunath Kelekar | Q75131 | 8715 |
| 23373 7590 03/22/2007 SUGHRUE MION, PLLC 2100 PENNSYLVANIA AVENUE, N.W. SUITE 800 WASHINGTON, DC 20037 | | | EXAMINER GELAGAY, SHEWAYE | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 2137 | |

| SHORTENED STATUTORY PERIOD OF RESPONSE | MAIL DATE | DELIVERY MODE |
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Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/820,790

Applicant(s)

KELEKAR, SAMIR GURUNATH

Examiner

Shewaye Gelagay

Art Unit

2137

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4, 15, 16, 29 and 30 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 15-16 and 29-30 is/are rejected.
- 7) ☒ Claim(s) 5-14, 17-28 and 31-38 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date ____.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- ☐ Notice of Informal Patent Application
- ☐ Other: ____.

DETAILED ACTION

Drawings

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the “a first data structure” and “a second data structure” must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

2. The disclosure is objected to because of the following informalities: Some of the informalities are: a brief summary or general statement of the invention as set forth in 37 CFR 1.73; the claim or claims must commence on separate sheet or electronic page (37 CFR 1.52(b)(3)). The spacing of the lines of the specification is such as to make reading difficult. New application papers with lines 1½ or double spaced on good quality paper are required. The Examiner suggests to the applicant to review the specification in light of the complete list of content of specification given below.

Content of Specification

- (a) Title of the Invention: See 37 CFR 1.72(a) and MPEP § 606. The title of the invention should be placed at the top of the first page of the specification unless the title is provided in an application data sheet. The title of the invention should be brief but technically accurate and descriptive, preferably from two to seven words may not contain more than 500 characters.
- (b) Cross-References to Related Applications: See 37 CFR 1.78 and MPEP § 201.11.
- (c) Statement Regarding Federally Sponsored Research and Development: See MPEP § 310.
- (d) The Names Of The Parties To A Joint Research Agreement: See 37 CFR 1.71(g).
- (e) Incorporation-By-Reference Of Material Submitted On a Compact Disc: The specification is required to include an incorporation-by-reference of electronic documents that are to become part of the permanent United States Patent and Trademark Office records in the file of a patent application. See 37 CFR 1.52(e) and MPEP § 608.05. Computer program listings (37 CFR 1.96(c)), "Sequence Listings" (37 CFR 1.821(c)), and tables having more than 50 pages of text were permitted as electronic documents on compact discs beginning on September 8, 2000.

Art Unit: 2137

- (f) Background of the Invention: See MPEP § 608.01(c). The specification should set forth the Background of the Invention in two parts:
 - (1) Field of the Invention: A statement of the field of art to which the invention pertains. This statement may include a paraphrasing of the applicable U.S. patent classification definitions of the subject matter of the claimed invention. This item may also be titled "Technical Field."
 - (2) Description of the Related Art including information disclosed under 37 CFR 1.97 and 37 CFR 1.98: A description of the related art known to the applicant and including, if applicable, references to specific related art and problems involved in the prior art which are solved by the applicant's invention. This item may also be titled "Background Art."
- (g) Brief Summary of the Invention: See MPEP § 608.01(d). A brief summary or general statement of the invention as set forth in 37 CFR 1.73. The summary is separate and distinct from the abstract and is directed toward the invention rather than the disclosure as a whole. The summary may point out the advantages of the invention or how it solves problems previously existent in the prior art (and preferably indicated in the Background of the Invention). In chemical cases it should point out in general terms the utility of the invention. If possible, the nature and gist of the invention or the inventive concept should be set forth. Objects of the invention should be treated briefly and only to the extent that they contribute to an understanding of the invention.
- (h) Brief Description of the Several Views of the Drawing(s): See MPEP § 608.01(f). A reference to and brief description of the drawing(s) as set forth in 37 CFR 1.74.
- (i) Detailed Description of the Invention: See MPEP § 608.01(g). A description of the preferred embodiment(s) of the invention as required in 37 CFR 1.71. The description should be as short and specific as is necessary to describe the invention adequately and accurately. Where elements or groups of elements, compounds, and processes, which are conventional and generally widely known in the field of the invention described and their exact nature or type is not necessary for an understanding and use of the invention by a person skilled in the art, they should not be described in detail. However, where particularly complicated subject matter is involved or where the elements, compounds, or processes may not be commonly or widely known in the field, the specification should refer to another patent or readily available publication which adequately describes the subject matter.

- (j) Claim or Claims: See 37 CFR 1.75 and MPEP § 608.01(m). The claim or claims must commence on separate sheet or electronic page (37 CFR 1.52(b)(3)). Where a claim sets forth a plurality of elements or steps, each element or step of the claim should be separated by a line indentation. There may be plural indentations to further segregate subcombinations or related steps. See 37 CFR 1.75 and MPEP § 608.01(i)-(p).
- (k) Abstract of the Disclosure: See MPEP § 608.01(f). A brief narrative of the disclosure as a whole in a single paragraph of 150 words or less commencing on a separate sheet following the claims. In an international application which has entered the national stage (37 CFR 1.491(b)), the applicant need not submit an abstract commencing on a separate sheet if an abstract was published with the international application under PCT Article 21. The abstract that appears on the cover page of the pamphlet published by the International Bureau (IB) of the World Intellectual Property Organization (WIPO) is the abstract that will be used by the USPTO. See MPEP § 1893.03(e).
- (l) Sequence Listing. See 37 CFR 1.821-1.825 and MPEP §§ 2421-2431. The requirement for a sequence listing applies to all sequences disclosed in a given application, whether the sequences are claimed or not. See MPEP § 2421.02.

Claim Objections

- 3. Claims 5-14, 17-28 and 31-38 are objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim should refer to other claims in the alternative only. See MPEP § 608.01(n). Accordingly, the claims have not been further treated on the merits.

Claim Rejections - 35 USC § 112

- 4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Art Unit: 2137

5. Claims 15-28 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The detailed description of the specification does not describe a logic encoded in media.

6. Claim 16 recites the limitation "the change" in line 4. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 101

7. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

8. Claims 15-28 are directed to non-statutory subject matter. Claims 15-16 recite "logic encoded in media" applicant has not specifically defined a media in the specification. A media could be interpreted consistent with the specification as paper or any other media. The claims should be amended to specify that the program stored in a computer readable media.

9. Claims 17-28 are rejected for being dependent on the rejected base claims.

Claim Rejections - 35 USC § 102

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

11. Claims 1-4 and 15-16 and 29-30 are rejected under 35 U.S.C. 102(e) as being anticipated by McClure et al. (hereinafter McClure) US Patent Number 7,152,105.

As per claims 1, 15 and 29:

McClure teaches a system for real-time vulnerability assessment of a host/device, said system comprising:

an agent running on the host/device, (figure 1, item 102) said agent comprising:
a first data structure for storing the status of interfaces and ports on the interfaces of the host/device, an executable agent module coupled to the first data structure to track the status of interfaces and ports on the interfaces of the host/device and to store the information, as entries in said first data structure, said executable agent module to compare the entries to determine a change in the status of interfaces and/or of ports on the interfaces of the host/device, (figure 3, col. 6, line 59-col. 8, line 8; col. 13, line 10-col. 15, line 40)

a remote destination server, (figure 1, item 100) said destination server comprising, a second data structure for storing the status of interfaces and the ports on the interfaces of the host/device, an executable server module coupled to the second

Art Unit: 2137

data structure to receive the information communicated by the agent executable module of the agent on the host/device, said executable server module to store the received information as entries in the second data structure wherein the entries indicate the state of each of the ports on each of the active interfaces of the host/device as received, said executable server module to compare the entries in said data structures to determine the change in the status of interfaces and ports on the interfaces of the host/device, and said executable server module to run vulnerability assessment tests on the host/device in the event of a change in the status of interface/ports. (col. 6, line 59-col. 8, line 8; col. 12, lines 30-64; col. 31, line 2-col. 32, line 37; col. 36, lines 3-26; col. 59, lines 4-33)

As per claim 2:

McClure teaches all the subject matter as discussed above. In addition, McClure further discloses a system of comprising: an executable server module coupled to a second data structure to receive and update the vulnerability data in the destination server used by the server for vulnerability tests, whenever new vulnerabilities are discovered, and said executable server module coupled to the second data structure to test the host/device for the new vulnerabilities whenever the vulnerability database is updated with new vulnerabilities and to determine the new vulnerabilities (col. 53, line 60-col. 54, line 40; col. 59, lines 4-34)

As per claims 3, 16 and 30:

McClure teaches all the subject matter as discussed above. In addition, McClure further discloses a system comprising:

an agent running on the host/device, (figure 1, item 102) said agent comprising: a first data structure to store the status of interfaces on the host/device and the ports on the interfaces on the host/device, an executable agent module coupled to the first data structure and operable to track the status of interfaces and ports on the interfaces of the host/device to collect and store the information, as entries in the first data structure, said executable agent module coupled to the first data structure to compare the entries to determine a change in the status of interfaces and/or of ports on the interfaces of the host/device, said executable agent module to communicate said changes to a remotely located destination server on the network, (figure 3, col. 13, line 10-col. 15, line 40) and

a destination server running remotely, (figure 1, item 100) said destination server comprising: a second data structure for storing the status of interfaces/ports on the host/device, an executable server module coupled to the second data structure to receive information communicated by the executable module on the host/device, said executable server module coupled to the second data structure to store the received information as entries in the second data structure wherein the entries indicate the state of each of the ports on each of the active interfaces of the host/device as received, said executable server module coupled to the second data structure to compare the entries to determine any change in the status of interfaces and ports on the interfaces of the host/device as reported to it, (figure 3, col. 6, line 59-col. 8, line 7; col. 13, line 10-col. 15, line 40) said executable server module coupled to the second data structure to process the changes to determine any new interfaces active and/or any newly opened ports on any of the active interfaces on the host/device on which services are listening

Art Unit: 2137

as reported to it, (figure 3, col. 8, line 59-col. 9, line 40; col. 13, line 10-col. 15, line 40) said executable server module coupled to the second data structure to run tests remotely to identify the network services running on the newly opened ports on the various active interfaces of the host/device, said executable server module coupled to the second data structure to run vulnerability assessment tests on the identified network services on the newly opened ports of the interfaces and storing the results, (figure 3, col. 10, lines 15-col. 11, line 57; col. 13, line 10-col. 15, line 40) and said executable server module coupled to the second data structure to obtain an incremental or an overall vulnerability status report of the host/device from the results of the current vulnerability tests, and previously stored results. (col. 10, lines 15-col. 11, line 57; col. 50, lines 11-35; col. 53, line 60-col. 54, line 40; col. 59, lines 4-34)

As per claim 4:

McClure teaches all the subject matter as discussed above. In addition, McClure further discloses a system comprising: an executable server module coupled to the second data structure to receive and update the vulnerability database in the vulnerability assessment server used by the server to do vulnerability tests, whenever new vulnerabilities are discovered publicly or elsewhere, and an executable server module coupled to the second data structure to test the host/device for the new vulnerabilities whenever the vulnerability database is updated with new vulnerabilities, and obtain results. (col. 53, line 60-col. 54, line 40; col. 59, lines 4-34)

Conclusion

Art Unit: 2137

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See Form PTO-892.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shewaye Gelagay whose telephone number is 571-272-4219. The examiner can normally be reached on 8:00 am to 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Emmanuel Moise can be reached on 571-272-3865. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Shewaye Gelagay

SG

Cynthia Britt
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PRIMARY EXAMINER
ART UNIT 2138
3-19-07